CLAIMS

- 1. A sealant composition for filter element which is a sealant for forming a seal section on the top face and/or bottom of a cylindrical filter element having a chrysanthemum-like cross section formed by pleating a filter medium, the sealant composition comprising a photopolymerization initiator sensitive to light having a wavelength of 380 nm or longer and an ethylenically double bond-containing compound and having photo-curing properties.
- 2. The sealant composition for filter element as claimed in claim 1, wherein the ethylenically double bond-containing compound is an acrylic compound having radical polymerizability.
- 3. The sealant composition for filter element as claimed in claim 2, wherein a polyfunctional acrylic compound is compounded as the acrylic compound having radical polymerizability.
- 4. The sealant composition for filter element as claimed in claim 3, wherein the polyfunctional acrylic compound is compounded in an amount of 3 parts by weight or more to the total acrylic compounds.
- 5. The sealant composition for filter element as claimed in any one of claims 1-4, wherein addition amount of the photopolymerization initiator is 0.1-15 parts by weight per 100 parts by weight of the ethylenically double bond-containing compound.
- 6. The sealant composition for filter element as claimed in claim 5, wherein the addition amount of the photopolymerization initiator is 0.1-10 parts by weight per 100 parts by weight of the ethylenically double bond-containing compound.
- 7. The sealant composition for filter element as claimed in any one of claims 1-6, which has a viscosity before photo-curing of 800 mPa·s or more.

- 8. The sealant composition for filter element as claimed in claim 7, which has a viscosity before photo-curing of 2,000 mPa·s or more.
- 9. A method of forming a seal section, which comprises filling the sealant composition for filter element as claimed in any one of claims 1-8 in a groove of a molding die comprising a material having permeability to light having a wavelength of 380 nm or longer and a solubility parameter of 8.5 or lower, the groove being formed coincident with a seal section to be formed on the top face and/or bottom of a cylindrical filter element having a chrysanthemum-like cross section formed by pleating a filter medium; setting the molding die in a seal section-forming portion on the top face and/or bottom of the filter element such that the filled sealant composition can be laminated; and irradiating the molding die with light having a wavelength of 380 nm or longer to cure the sealant composition by the light having transmitted through the molding die, thereby forming a seal section on the top face and/or bottom of the chrysanthemum-like cylindrical filter element.
- 10. The method of forming a seal section as claimed in claim 9, wherein the material of the molding die is polytetrafluoroethylene, ethylene fluoride-propylene copolymer resins, perfluoroalkoxy resins, polypropylene, or polyethylene.
- 11. The method of forming a seal section as claimed in claim 10, wherein the material of the molding die is polytetrafluoroethylene, ethylene fluoride-propylene copolymer resins, or perfluoroalkoxy resins
- 12. The method of forming a seal section as claimed in any one of claims 9-11, wherein the irradiation dose of light having a wavelength of 380 nm or longer is 200 mJ/cm² or more.
- 13. The method of forming a seal section as claimed in claim 12, wherein the irradiation dose of light having a wavelength of 380 nm or longer is 500-10,000 mJ/cm².